

## Abstracts

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Report on Wage Structure. We also use other information such as the Korean Statistical Information System. **RESULTS:** The estimated costs of cancer are as follows: 9.60 billion US PPP\$ (\$ hereafter) in 1999, \$9.60 billion in 2000, \$9.62 billion in 2001, \$9.01 billion in 2002, and \$9.87 billion in 2003. We find that indirect cost accounts for about 80% of total cost during that period, but the proportion has been dropped since 2000; from 84.6% in 2000 to 78.7% in 2003. The proportions of the cost of male and female cancer patients are about 77% and 23% respectively during the period. The cost of three major cancers in 2003 accounts for 53.3% of total cost of cancers: the cost of liver cancer is \$2.26 billion (22.9% of total cost of all cancers); \$1.67 billion (16.9%) in stomach cancer; and \$1.33 billion (13.5%) in bronchial and lung cancer. **CONCLUSIONS:** The cost of cancer has been steadily increasing from 1999–2003 except 2002, while the proportion of indirect costs has gradually decreased since 2000.

## PCN12

#### ESTIMATING COSTS OF UNCONTROLLED CHEMOTHERAPY-INDUCED NAUSEA AND VOMITING AMONG WORKING-AGE CANCER PATIENTS

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**OBJECTIVES:** Poorly controlled CINV may lead to additional office or emergency room visits, thus, increasing the overall costs of cancer care. This study estimates the societal costs of uncontrolled CINV for working-age cancer patients. **METHODS:** Employees or spouse and/or dependents with cancer who received highly or moderately emetogenic chemotherapy were identified from a 1997–2002 proprietary dataset linking medical claims to work-loss information. Patients were followed from the earliest date of chemotherapy for up to six-months, excluding those with less than three-months of continuous enrollment. Direct medical costs were measured using payments, normalized as monthly, and updated to 2004 USD. Work loss days were identified from employment records. Costs of uncontrolled CINV were derived by comparing medical costs and work-loss days for three groups, patients with uncontrolled CINV and no ER visit, with uncontrolled CINV and ER visit, and with controlled CINV, using the Wilcoxon Mann-Whitney test in univariate analyses. All patients with uncontrolled CINV were pooled as one group in multivariate analysis. **RESULTS:** In all, 2,071 patients were identified; 25% required medical care for uncontrolled CINV; 2% had ER visits. Compared with patients with controlled CINV (\$8132), total direct costs were significantly higher for patients with uncontrolled CINV, no ER (\$10,376,  $P < 0.001$ ) and uncontrolled CINV and ER (\$12,810,  $P < 0.001$ ), respectively. Estimated work-loss days were 6.1, 7.2, and 8.9 days the above groups, respectively. After controlling for demographics, geographic regions, and comorbidities, the difference in monthly medical costs between the controlled and uncontrolled group was \$2619 ( $P < 0.001$ ). However, the difference in work-loss (0.21 days) was no longer significant ( $P = 0.73$ ). **CONCLUSIONS:** Uncontrolled CINV was associated with a significant increase in medical costs. For patients with uncontrolled CINV but no ER visit, increases in cost were driven by outpatient care, whereas for those with ER visits, inpatient care was the major cost driver.

## PCN13

#### SURVIVAL AND COST FOLLOWING BREAST CANCER RECURRENCE: ESTIMATES FROM SEER-MEDICARE DATA

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**OBJECTIVES:** A variety of pharmacologic therapies are available or in development for the prevention of breast cancer recurrence. Assessing the benefits of these treatments is compromised by a paucity of data on the impact of recurrence on economic costs and patient survival. The purpose of this study was to shed light on these issues. **METHODS:** We conducted a retrospective analysis of SEER-Medicare data, which consists of information from the SEER cancer registry linked to administrative claims from the Medicare program. All patients in SEER who were diagnosed with and treated for primary breast cancer during 1991–1993 were identified, and their subsequent Medicare claims histories were scanned for evidence of recurrence. Patients were stratified according to type of recurrence (local, contralateral, or distant) and their Medicare claims further scanned from the time of their recurrence through 2002 to assess patterns of survival and health care costs (which were inflated to 2003 dollars). Patients who did not have recurrence were used as controls. Techniques pioneered by Lin for the analysis of censored cost data were used to estimate ten-year undiscounted costs of recurrence by type. **RESULTS:** We identified 8725 patients in SEER who were diagnosed with and treated for primary breast cancer during 1991–1993, including 1485 who subsequently had a recurrence (local, 759; contralateral, 228; distant, 498). Median survival was 124.0 months among controls, versus 42.8 and 7.1 months among patients with local and distant recurrence, respectively; 52.4% of patients with contralateral recurrence remained alive after all data were censored at 93.5 months. Cumulative ten-year costs following local, contralateral, and distant breast cancer recurrence exceeded those of controls by \$84,406, \$29,609, and \$222,106, respectively. **CONCLUSION:** The impact of breast cancer recurrence on patient survival and economic costs is substantial and varies considerably by type.

## PCN14

#### IS COMBINED ANDROGEN BLOCKADE WITH BICALUTAMIDE COST-EFFECTIVE COMPARED WITH COMBINED ANDROGEN BLOCKADE WITH FLUTAMIDE?

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**OBJECTIVES:** Both bicalutamide and flutamide are commonly used in combined androgen blockade (CAB) for prostate cancer. Although bicalutamide is more costly than flutamide, it is important that efficacy and quality of life outcomes as well as compliance, and side effects are also taken into consideration when determining whether CAB with bicalutamide is a cost-effective option as compared to CAB with flutamide. Unfortunately, there have been no well-designed cost-effectiveness analyses comparing bicalutamide vs. flutamide as part of CAB. The goal of this study was to determine the cost-effectiveness of CAB with bicalutamide vs. CAB with flutamide in men with stage D2 prostate cancer. **METHODS:** A decision model was created to compare treatment strategies. Survival and side effect information was